

DOCUMENT RESUME

ED 322 898

IR 014 653

TITLE The Cutting Edge: R&D Products To Strengthen Curriculum and Instruction.

INSTITUTION Regional Laboratory for Educational Improvement of the Northeast & Islands, Andover, MA.

PUB DATE Oct 88

CONTRACT 400-86-0005

NOTE 41p.; Pages on colored stock in the original may not reproduce clearly.

AVAILABLE FROM The Regional Laboratory for Educational Improvement of the Northeast and Islands, 300 Brickstone Square, Suite 900, Andover, MA 01810 (free, shipping \$2.50).

PUB TYPE Reference Materials - Bibliographies (131) -- Reports - Descriptive (141)

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.

DESCRIPTORS Abstracts; Adult Education; Basic Skills; Computer Assisted Instruction; Computer Software; *Educational Research; *Educational Resources; Elementary Secondary Education; *Instructional Materials; Microcomputers; Models; Research and Development; Thinking Skills

ABSTRACT

This is more than an annotated bibliography. It offers information to teachers and instructors in many subject areas including mathematics, science (interfacing microcomputer software for science laboratories), English as a second language, oral communication, keyboarding (software), writing, basic skills, test taking skills, vocational education, reading, and social studies. The summaries fall into two categories: (1) abstracts of opinion papers that provide advice and instructional tips for the classroom; and (2) descriptions of program models or products developed in response to a stated problem. Summaries falling into the first category contain a problem statement and a short discussion of some of the solutions to that problem. Summaries in the second category contain a problem statement, a discussion of the research conducted, a brief explanation of the conclusions reached, and a description of the program or product developed. A product order form is attached.

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THE CUTTING EDGE: R&D Products

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To Strengthen Curriculum and Instruction

October 1988

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THE CUTTING EDGE: NEW R&D PRODUCTS

TO STRENGTHEN CURRICULUM AND INSTRUCTION

Strengthening Curriculum

Computer Lab Tools for Science: An Analysis of Commercially Available Science Interfacing Software for Microcomputers by Dave Weaver (The Northwest Regional Educational Laboratory)

Computers in Adult Education: A Planning Guide and Software Reviews for Adult Education Applications (Merrimack Education Center)

Connecticut's Common Core of Learning (Connecticut State Department of Education)

Curriculum Reform and School Performance: An Evaluation of the 'New Basics' by Karl L. Alexander and Aaron M. Pallas (Center for Social Organization of Schools)

Database Software for Social Studies (The Northwest Regional Educational Laboratory)

Designing and Evaluating Language Programs for African American (Black) Dialect Speakers: Some Guidelines for Educators by Pauline E. Brooks (Center for the Study of Evaluation)

ESL Software for Use with High School and Adult Students and Product Descriptions: ESL Software for Use with High School and Adult Students by Bruce Carrick (Northwest Regional Educational Laboratory)

Function Plotters for Secondary Math Teachers and Product Descriptions: Function Plotters for Secondary Math Teachers by Dave Weaver, Monica Nelson, and Anne Batey (Northwest Regional Educational Laboratory)

Portraits of Our Mothers by Frances Arick Kolb (The NETWORK, Inc.)

Quality Social Studies Education in Rhode Island (The Regional Laboratory for Educational Improvement of the Northeast and Islands)

R&D Interpretation Service Bulletins on Math by Jean Sealey (Appalachia Educational Laboratory)

R&D Interpretation Service Bulletins on Science by Jean Sealey (Appalachia Educational Laboratory)

Sketches on Educational Research: Health in School (Far West Laboratory for Educational Research and Development)



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Developing Skills

Basics: Bridging Vocational and Academic Skills (The National Center for Research in Vocational Education)

Building Basic Skills: The Dropout by James M. Weber and Cindy Silvani-Lacey (The National Center for Research in Vocational Education)

Building Basic Skills: Models for Implementation by Lucille Campbell-Thrane, Kevin Manning, Karen Okefor, and E. Jane Williams (The National Center for Research in Vocational Education)

A Catalog of Programs for Teaching Thinking Skills by Janice Kruse and Barbara Z. Presseisen (Research for Better Schools)

Classroom Activities in Thinking Skills by Janice Kruse (Research for Better Schools)

A Comparison of Keyboarding Software for the Elementary Grades and Keyboarding Software Product Reports by Kathleen Nolf and Dave Weaver (Northwest Regional Educational Laboratory)

A Comprehensive Cooperative Learning Approach to Elementary Reading and Writing: Effects on Student Achievement (Center for Research on Elementary and Middle Schools)

Critical Thinking and Thinking Skills: State of the Art Definitions and Practice in Public Schools by Barbara Z. Presseisen (Research for Better Schools)

The Effective Writing Teacher: 18 Strategies by John Collins (The NETWORK, Inc.)

A Good Girl Writes like a Good Girl: Written Response and Clues to the Teaching/Learning Process by M. Sperling and S. Freedman (Center for the Study of Writing)

Implementing the Recommendations of Becoming a Nation of Readers: A Guide for Practitioners (The Regional Laboratory for Educational Improvement of the Northeast and Islands)

KEA-AEL Tips for Teaching Marginal Learners (Appalachia Educational Laboratory)

Kids Accepted Here: Activities for the Classroom (The NETWORK, Inc.)

A Model for Assessing and Meeting Needs in Instructional Computing: Procedures and Results of a Multi-State Needs Assessment by the Appalachia Educational Laboratory (Appalachia Educational Laboratory)

Profile of Teaching Reading Comprehension: A Video and Print Inservice Education Series (North Central Regional Educational Laboratory)



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R&D Interpretation Services Bulletins on Reading by Jean Sealey (Appalachia Educational Laboratory)

R&D Interpretation Services Bulletins on Written and Oral Communication by Jean Sealey (Appalachia Educational Laboratory)

Research Within Reach: Secondary School Reading by Donna E. Alvermann, David W. Moore, and Mark W. Conley (Appalachia Educational Laboratory)

Test Scores Count! A Handbook for Teaching Test-Taking Skills by Sharon Koenigs (Mid-continent Regional Educational Laboratory)

Thinking Skills (Research for Better Schools)

Transition, Special Needs, and Vocational Education by Patricia L. Sitlington (National Center for Research in Vocational Education/ERIC)

Unintentional Helping in the Primary Grades: Writing in the Children's World by Anne Haas Dyson (Center for the Study of Writing)

Publications available from The Regional Laboratory are listed on the order form on the last page. Most publications described in **The Cutting Edge** are available from the organizations that produced them. Please see individual descriptions for ordering information.

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Science Laboratory Software Analyzed for Instructional Use

Computers are becoming common laboratory tools in science instruction, so much so, in fact, that there are at least 30 science interfacing packages available on the commercial market.

To help teachers determine which of these software packages best matches the instructional needs of students in their science laboratories, Dave Weaver of Northwest Regional Educational Laboratory has not only reviewed the 30 packages but also evaluated 16 of them.

According to Weaver, a science interfacing package consists of a set of programs on a disk, a user's manual, and additional hardware which includes one or more sensory devices. Combined with a microcomputer, the package can be used, for example, in experiments involving the measurement and monitoring of various physical phenomena such as temperature, time, light intensity, frequency, heart rate, and wind speed.

In evaluating the packages, Weaver used a rating scale of 1 (low) to 5 (high) to measure the following categories: hardware provided with package; supplementary printed materials; suggested experiments; data displays and analysis features; and ease of use and technical characteristics. He also includes information on the hardware required to use a package, appropriate grade

level, any special background that the package user must have, contacting the package's producer, and package costs.

Weaver points out that science interfacing packages are laboratory tools which automate various aspects of laboratory procedures. They are not intended to replace the functions they automate and students must still acquire the data gathering and analysis skills that are the backbone of scientific study. Also, says Weaver, the packages are best used in discovery learning environments where small groups of students work together at various science activities.

Source

Reprints of *Computer Lab Tools for Science: An Analysis of Commercially Available Science Interfacing Software for Microcomputers* by Dave Weaver is available from the Publications Department of The Regional Laboratory for Educational Improvement of the Northeast and Islands, 290 South Main Street, Andover, MA 01810 (87 pages, \$10.50 plus \$2.50 postage and handling per order). Cite order number 9305-22.

For your convenience an order form has been included at the back of this booklet.



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Guides Help Match Technology To Adult Learning Needs

Integrating computers into ongoing instructional programs in adult learning centers brings with it a plethora of difficult decisions. What instructional or management objectives is the computer supposed to accomplish? What software options exist for adult learners? What should be the criteria for selecting hardware? What kind of staff development is needed?

To help adult education personnel make some of these decisions, the Merrimack Education Center, in cooperation with the Massachusetts Department of Education, has developed two guidebooks. One is a planning guide for activities such as matching computer applications to student needs, identifying and evaluating software, selecting hardware, designing staff development programs, and organizing successful learning environments.

The second guide summarizes practitioners' evaluations of over 100 software products that can be used with adult learners. It is a ready resource that enables adult educators to quickly identify which software to examine in more depth and, ultimately, to acquire. Products evaluated include software

on computer literacy, English as a second language, language arts, life skills, mathematics, reading, science, and social studies.

Each summary includes a profile of the software and rates its instructional content and technical characteristics on a four-point scale. It concludes with comments from reviewers and an overall recommendation on the item.

Source

The first guidebook, *Computers in Adult Education: A Planning Guide* is available for \$9.75 prepaid. The second guidebook, *Software Reviews for Adult Education Applications*, costs \$19.50 bound and \$15.00 unbound but ready for insertion in a three-ring binder. Both publications are available from the Merrimack Education Center, 101 Mill Road, Chelmsford, MA 01824.



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Connecticut State Board Makes "Vision" of Better Schooling Catalyst for Improvement

The Connecticut State Board of Education has adopted a "Common Core of Learning" (CCL) as that state's "vision of what Connecticut's high school graduates should know and be able to do."

The CCL isn't a state mandate or a condition for graduation. Rather, it's a set of expectations for schools and youth, thereby enhancing the quality and equality of educational opportunities throughout the state.

It is also considered a "catalyst for school improvement." The Board hopes that by laying out "a common set of skills, knowledge and attitudes" that all students are expected to have upon graduation from high school, it can influence local education programs, goals, and resource allocations.

The CCL is organized under three major headings and then subdivided into learning outcomes. Thus, the "Attributes and Attitudes" section lists such items as self-concept, motivation, and persistence. "Skills and Competencies" lists reading, writing, speaking, listening, and so forth. "Understandings and Applications" includes, among others, the arts, careers and vocations, and cultures and languages.

The CCL aims for the maximum level of competency while recognizing that students have different abilities, interests and aspirations. "Recognizing these differences,

however, does not justify the development of a different Common Core for each student," the document maintains. "To the contrary, the goal of each student developing to his or her fullest potential argues for the creation of one Common Core that has the highest expectations for each child."

The CCL is formatted as a slim booklet. A note to the reader states, "The language is deliberately simple. We do not believe that good education ought to be mysterious."

Source

Connecticut's Common Core of Learning is available from Public Information Office, Room 304, Connecticut State Department of Education, P.O. Box 2219, Hartford, CT 06145 (21 pages, free to educational and not-for-profit organizations; \$1 to cover postage and handling for others; make checks payable to Treasurer, State of Connecticut).

Also available from The Regional Laboratory. See order form on last page.



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New Basics Help Good Students Do Better

High school students who are already getting A's and B's in their courses will raise their scores on standardized tests if they complete the New Basics curriculum proposed by the report of the National Commission on Excellence in Education.

Such a curriculum includes four years of English, three each of math, science, and social studies, one half-year of computer science, and two years of foreign language study.

Sociologists Karl Alexander and Aaron Pallas find that students who actually do complete a new basics curriculum increase their standardized achievement test scores drastically -- but only if they are high performing students in the first place. Low performing students show no increases in test scores due to toughening their way through a tougher curriculum.

The researchers note that many schools are bottom-heavy with low achievers and under-achievers -- the very students who do not benefit from a new basics curriculum.

Source

Curriculum Reform and School Performance: An Evaluation of the 'New Basics' by Karl L. Alexander and Aaron M. Pallas is available from the Educational Research Dissemination Office, Center for Social Organization of Schools, The Johns Hopkins University, 3505 North Charles St., Baltimore, MD 21218 (44 pages, \$3.00).



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Publication Evaluates Computer Software for Use in Social Studies Classrooms

A new publication from Northwest Regional Educational Laboratory compares more than 45 microcomputer software packages for use in social studies classrooms.

Written by Dave Weaver, the publication separates the software packages into three types: general purpose database management packages consisting of the database management software program and supplementary print materials; separately available data disks containing information on a specific topic; and dedicated database packages that include both the database management software and a useful set of data. It then evaluates each package according to its features and capabilities as well as the opinions of educators who have used it.

All of the packages evaluated involve students in using or, in some cases, building and designing a database of information related to social studies.

According to Weaver, designing and building database managers can develop students' higher level thinking skills, organizational skills, communication skills, and research skills -- while also teaching social studies.

The publication includes a list of currently available products, a discussion of their classroom uses, a table outlining the features and capabilities of each package, a table summarizing teacher evaluation options, a detailed description of each product, producer contact information, and background information about databases.

Source

Database Software for Social Studies is available from the Northwest Regional Educational Laboratory, Document Reproduction Service, 101 S.W. Main Street, Suite 500, Portland, OR 97204 (55 pages; \$8.90).



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Language Programs Should Treat Standard Dialect as Tool for Broadening Communication

Language arts programs for children who speak African American dialect should present standard dialect as a tool for broadening communication and not as a replacement for "defective language," says Pauline E. Brooks in a publication written for the Center for the Study of Evaluation at the University of California at Los Angeles.

In a series of guidelines to help schools design and evaluate language programs for African American dialect speakers, Brooks cautions that, "Attacking or diminishing that which the learner brings to the learning setting has the effect of silencing, not stimulating, the learner." A far more positive approach, she suggests, is to begin with the language and experiences children bring with them to the classroom and then build "associative bridges" between children's knowledge of the first dialect and the goals of instruction in the second dialect.

Brooks also states that educators must be constantly aware of "the necessity of checking and re-checking the match between philosophical underpinnings and program practices." Hidden assumptions and values in either the structure or content of educational materials can inadvertently sabotage a new language program, she says.

Brooks recommends that developers of language programs minimize misunderstandings by bringing different interest groups into the design, implementation, and evaluation process, noting that "different audiences will require different information." In assessing the strengths and weaknesses of language programs for African American children, Brooks recommends that evaluators look at each individual program component, including staff training, administrative and school support, relationships between the community and the school, program funding, the adequacy of program facilities, curricula and materials, instructional methods and strategies, educational objectives, and the general educational environment.

Source

Designing and Evaluating Language Programs for African American (Black) Dialect Speakers: Some Guidelines for Educators is available from the Center for the Study of Evaluation, UCLA Graduate School of Education, 145 Moore Hall, Los Angeles, CA 90024-1521 (21 pages, \$2.50 prepaid).



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ESL Software Provides Tools For Teaching English Language To High Schoolers and Adults

Teachers who are instructing high school students and adults in English as a Second Language (ESL) and looking for computer software with which to drill students in simple verb and subject use might want to take a look at "ESL Picture Grammar." ESL teachers looking for a way to teach sentence patterns, on the other hand, might be more interested in "Sentence Maker." "Hide'n Sequence" is a reading and writing program that asks non-English speaking students to arrange a cut-up story. And "SocMate," though designed for native speakers, can help ESL students strengthen vocabulary.

And the list of software goes on, with names like "Speakeasy," "Essential Idioms in English," "Language Experience Recorder," "Sentence Combining," and "Vocabulary Master."

In all, 44 software programs appropriate for use with high school and adult ESL students are reviewed in a two-part publication by Bruce Carrick of the Northwest Regional Educational Laboratory.

Carrick divides the programs into three areas: grammar, reading and writing, and vocabulary. Then he provides information on the software's producer, price, computer compatibility, copyright, focus or actual

content, type (drill, game, tutorial, problem solving, or utility), grade level, proficiency level, whether the program is ESL ready or needs to be modified, and whether the program supplies teachers with student results.

The bulk of the information, including summary descriptions and highlights of ten titles and one product line which Carrick recommends that educators review is provided in the first volume of the report. The second volume describes all 44 software programs in more detail and includes reviewers' comments.

Source

ESL Software for Use with High School and Adult Students (10 pages) is available for \$3.50. This document plus *Product Descriptions: ESL Software for Use with High School and Adult Students* (24 pages) is available for \$7.70 from Northwest Regional Educational Laboratory, Document Reproduction Service, 101 S.W. Main St., Suite 500, Portland, OR 97204.



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Benefits Outweigh Negatives in Using Computer Software to Graph Mathematical Equations

High school mathematics teachers looking for computer software to help students graph mathematical equations can review the positive and negative factors associated with over thirty such products in a new publication by the Northwest Regional Educational Laboratory.

Dave Weaver, Monica Nelson, and Anne Batey examined graphing utilities or function plotters for use in algebra, coordinate geometry, trigonometry, and calculus. In general, they found that there are more pluses than minuses to the use of function plotters in the classroom.

"The ability to automate the tedious process of plotting the graph of an equation enables students to examine more equations in a shorter time. Teachers need to spend less time sketching graphs on the overhead or blackboard with their backs to their students. The zoom and scroll features found in many function plotters offer capabilities which cannot be duplicated manually," Weaver, Nelson, and Batey write.

Among the more negative features of the programs, the reviewers found that "Few of the products were able to properly label the graph in the same way teachers would expect and demand from their students."

Also, they found that "While math teachers are aware that, in theory, the graphs of functions are a smooth curve, the use of

computer graphing utilities could easily lead a student to believe otherwise. Because of the resolution of microcomputers, it is impossible for any of these products to make a smooth graph."

The report assesses the general features of each graphic utility package and sorts the packages into types according to whether they have general purpose graphing utility, are designed explicitly to demonstrate selected mathematical concepts, or contain a collection of graphing utility programs. The packages are then evaluated according to their usefulness in particular mathematics subject areas.

Source

Two companion documents are available from the Northwest Regional Educational Laboratory, DRS, 101 S.W. Main St., Suite 500, Portland, OR 97204.

Function Plotters for Secondary Math Teachers identifies and compares available software (13 pages, \$4.15). This report may also be ordered along with a second volume, *Product Descriptions: Function Plotters for Secondary Math Teachers*, which describes the individual software packages (23 pages) for \$9.50. Cite order no. NL-1087-NE.



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Activities Highlight Women's Role in History

Accomplished women appear throughout history — in social movements, political movements, labor unions, and other fields. Ordinary women appear less frequently but are no less important to understanding the role women have played in history. These are the women who reared children, strived to improve their communities, concerned themselves with health care, and sometimes ran a variety of home industries as well.

To encourage teachers to weave study of the lives of ordinary women into school curricula, The NETWORK, Inc., has published *Portraits of Our Mothers*, a compilation of classroom activities that teaches students an appreciation of women's roles in history. Along the way, students also learn a good deal about their own families and communities, and about history and historical methods. They also sharpen their research, writing, listening, and even quantitative math skills.

Activities in *Portraits of Our Mothers* were originally developed for use as part of National Women's History Week in Quincy, Massachusetts. They can be used, however, in any place and at any time. Most activities have students use oral and photographic histories. Through oral histories, for example, students might learn about how ordinary people's lives were

affected by the political and economic events discussed in textbooks.

Photographs would teach them about social customs, celebrations of events, clothing styles, and class differences.

The activities can be used as individual learning units, or they can be integrated into subject area lessons. They are appropriate to many grade levels.

For school districts interested in replicating Quincy's Women's History Week celebration, there are tips on planning and carrying out such an event.

Portraits of Our Mothers received honorable mention in the 1986 American Educational Research Association's Women Educators Curriculum Award competition.

Source

Portraits of Our Mothers by Frances Arick Kolb is available from the Publications Department, The Regional Laboratory for Educational Improvement of the Northeast and Islands, 290 South Main Street, Andover, MA 01810 (75 pages, \$13.00 plus \$2.50 postage and handling per order). Cite order no. 415-22.

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Social Studies Should Stress Depth Instead of Breadth And Promote Cultural Heritage

Evaluating and improving the state of social studies programs in Rhode Island is the subject of a joint effort of The Regional Laboratory for Educational Improvement of the Northeast and Islands, the Rhode Island Social Studies Association, Rhode Island College, and the Rhode Island Department of Education.

The report reviews major issues involved in designing and developing a social studies curriculum for grades K-12. It concludes:

- Social studies curricula are best developed at the local level;
- The curriculum should emphasize the knowledge, skills, and attitudes an effective citizen needs to function in a global community;
- Teachers should emphasize depth and understanding rather than broader coverage of great amounts of detailed information; and
- Curriculum must promote appreciation and understanding of our cultural heritage.

For decades, most social studies curricula have been based on the "expanding environments" model. In kindergarten, students concentrate on the self, community, and home, gradually expanding their focus through the elementary and high school years.

Although this framework can lack flexibility, particularly in elementary grades where it is reinforced with textbooks, existing programs can be improved, the report says.

The report also presents an evaluation model based on four questions: What does the literature and research say a quality program should encompass? To what extent is the present curriculum being implemented? To what extent are students mastering the program objectives? And how good is the program?

Other chapters are on integrating social studies concepts into a literacy based K-3 curriculum, teaching social studies to special populations, and selected references. Appendices carry reprints of articles on what constitutes social studies and how the subject should be taught.

Source

Quality Social Studies Education in Rhode Island is available from The Regional Laboratory for Educational Improvement of the Northeast and Islands, 290 South Main Street, Andover, MA 01810 (cite order no. 9036-22, 112 pages, \$5.00 plus \$2.50 postage and handling, prepaid).

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Bulletins Provide Instructional Tips for Teaching Mathematics

Want to boost students' ability to solve mathematics problems? Design effective remediation programs? Gear instruction to individual learning differences?

Instructional tips on coping with these three common problems in mathematics instruction are contained in a series of bulletins provided by the Appalachia Educational Laboratory's R&D Interpretation Service.

Prepared by Jean Sealey, each bulletin provides research-based strategies that teachers can put to immediate use in their classrooms. For example, Sealey suggests that teachers break the problem-solving process down into four stages. This not only provides students with a way to think about the problem but also helps teachers identify where students are experiencing learning difficulties. She also discusses various roles teachers can play in the teaching of problem solving, depending on students' problem-solving abilities, and what teachers can do to incorporate features of an effective problem-solving program into mathematics instruction.

Among recommendations for designing effective remediation programs, Sealey reminds teachers to be accepting of student difficulties. "Remember that the students are usually aware of their difficulties. It is important that you establish an atmosphere

of acceptance," she says. Sealey also lists six questions that teachers can ask themselves to help identify the source of students' learning difficulties and gives examples of effective remedial techniques.

Tips on teaching to individual differences focus on determining students' levels of cognitive development and recognizing and instructing students with different cognitive styles. There is also a brief discussion of other differences that affect learning such as intelligence and motivation, sensory preferences, and preparation.

Source

Reprints of the R&D Interpretation Service Mathematics Bulletins, *Problem Solving*, *Remediation*, and *Individual Differences*, are available from the Publications Department, The Regional Laboratory for Educational Improvement of the Northeast and Islands, 290 So. Main Street, Andover, MA 01810 (\$2.50 for the set, plus \$2.50 postage and handling per order). Cite order no. 9303-22.

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Laboratory Turns Research Into Practical Tips for Improving Science Instruction

One way to increase students' science achievement is to involve more parents in their children's education. Another is to try new instructional strategies. Also, teachers and administrators wanting to improve science instruction might do well to heed some of the lessons of the science curriculum development projects of the 1960s.

These and other research-based tips for boosting students' knowledge of science are discussed in three pamphlets created by Jean Sealey of the Appalachia Educational Laboratory's R&D Interpretation Service.

Two of the pamphlets contain easy-to-do activities for teachers. To increase parent involvement, for instance, Sealey suggests that teachers keep forms on hand to notify parents of incomplete or missing homework assignments. She also gives teachers instructions they can share with parents on how parents and children together can do a simple lesson on flight using paper airplanes.

The second pamphlet discusses scientific literacy and instructional strategies such as Mastery Learning and Personalized System of Instruction (PSI). Also included are recommendations for teachers on using advance organizers, focusing and questioning techniques, manipulative activities, alternative materials, and testing procedures.

The third pamphlet reviews research on major science curriculum projects of the past. "Even though the content of the curricula may no longer be directly applicable to today's science classrooms, the principles underlying the development of the curricula are," says Sealey. She then goes on to discuss setting new goals for science education; designing science curricula to meet these goals; improving teacher preparation and inservice programs; incorporating research findings into curriculum design; evaluating the effectiveness of new programs; and creating ways for teachers to seek out and study exemplary programs.

Source

Reprints of the R&D Interpretation Services Science Bulletins, *Parent Support and Involvement*, *Instructional Strategies*, and *Curriculum Development Projects of the Sixties*, are available from the Publications Department, The Regional Laboratory for Educational Improvement of the Northeast and Islands, 290 South Main Street, Andover, MA 01810 (\$2.50 for the set, plus \$2.50 postage and handling per order). Cite order no. 9302-22.

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More Positive Approach Replaces Older Gloom and Doom Tactics in Student Health

Health education is taking its long overdue place in the school curriculum, complete with sequential development of objectives and materials, an emphasis on behavior change, and a shift to student-centered learning.

According to a bulletin from the Far West Laboratory for Educational Research and Development, while traditional health curriculum materials "tended to take a gloom and doom approach, showing the negative impacts of smoking, drugs or early sex, often through the use of scare tactics," the new approach is based on "building the appropriate knowledge and skills needed to adopt positive behaviors."

"Kindergarten and first grade youngsters may learn basic facts about the body; elementary age students expand their knowledge of the body and the importance of social influences in determining choices; and junior high students practice positive social interactions to resist peer pressure to take that drink or light that cigarette," says the bulletin.

The new emphasis is not without its complications, however. One problem is making information about new curricular materials available to school decisionmakers. Another problem: "teaching materials are abundant, qualified health teachers are not."

The bulletin also describes steps that two states, California and Oregon, have taken to address these issues.

Source

Sketches on Educational Research: Health in School is available from Far West Laboratory for Educational Research and Development, 1855 Folsom St., San Francisco, CA 94103 (4 pages, \$2.00 prepaid).



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Vocational Education Students Link Learning of Basic Skills to Job Success in "Real World"

An instructional approach developed by the National Center for Research in Vocational Education undoes the notion, frequently found among vocational education students, that there's no connection between academics and real-world success.

The approach features academic and vocational education teachers working together to instruct students in the basic skills in reading, writing, speaking, and mathematics. Along the way, students come to recognize that there is, indeed, a link between basic skills achievement and vocational tasks.

Simply put, the approach works like this. Before beginning a new unit of instruction, academic and vocational teachers confer to decide which basic skill to target. For example, carpentry students need to know how to calculate the amount of material they will need for a specific job and what it will cost. At the appropriate point in the students' carpentry instruction, the academic teacher will begin teaching the skills students need in order to complete the calculation, incorporating students' carpentry experience into the instruction.

Vocational educators may also bring academic-subject teachers in as consultants. This helps vocational education teachers incorporate basic skills instruction into various occupational teachings.

Researchers at the National Center have developed a series of resources to help vocational and academic teachers, program coordinators, administrators, and other support groups put this cross-disciplinary approach into action. These resources are made up of three sets of written guides as well as video- and audiocassettes that give both practical and theoretical information on upgrading students' basic skills. The guides contain information on, for example, instruction in specific basic skills, materials development, time management, using software, techniques for vocational and academic teachers working together, and program evaluation.

A 15-minute videocassette, designed for school boards, parents, employers, and other community members introduces the program.

Source

Cost information on *Basics: Bridging Vocational and Academic Skills* is available from The National Center for Research in Vocational Education, The Ohio State University, Publications Office, Box SP, 1960 Kenny Road, Columbus, OH 43210.



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Basic Skills Enhance Success Of Vocational Education

Vocational training that incorporates a strong basic skills component offers potential dropouts the most opportunity to succeed in high school, say investigators at The National Center for Research in Vocational Education at The Ohio State University.

James Weber and Cindy Silvani-Lacey assembled data from 19 studies on the dropout problem and found that while the average basic skills performance of potential and actual high school dropouts hovered at about the fifth grade level, these skills increased substantially when mathematics and language instruction were combined with vocational training. Among their recommendations for developing a program especially suited for potential dropouts, the researchers urge:

- spelling out the structure, goals, and objectives of instruction so that students understand them;
- identifying potential dropouts early;
- developing and evaluating programs with separate presecondary and secondary components;
- utilizing individualized instruction materials and techniques;

- considering flexible program delivery; and
- increasing overall effectiveness by integrating other support services into the student's program.

Weber and Silvani-Lacey also found that the basic skills levels of students in different vocational programs varied significantly. Students enrolled in business generally performed higher than did students enrolled in agriculture, health, technical, and trade and industrial programs. The basic skills achievement of these latter students, however, generally surpassed that of students enrolled in distributive education and home economics.

Source

Building Basic Skills: The Dropout by James M. Weber and Cindy Silvani-Lacey is available from The National Center for Research in Vocational Education, National Center Publications, Box R37, 1960 Kenny Road, Columbus, OH 43210-1090 (order no. RD236-NE, 58 pages, \$5.75).



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Basic Skills Models In Vocational Education Show Pros and Cons

Under pressure from employers, vocational educators are hunting for ways to put basic skills instruction into their job training programs.

Their search has turned to three different models, and according to investigators at the National Center for Research in Vocational Education at The Ohio State University, each model has its own pros and cons.

For example, an integrated model, one that ties basic skills instruction to job skills, presents an attractive alternative for teaching potential dropouts because students can see the link between academics and employment. Although vocational teachers need to be trained in this model, there are no extra teachers, space, or rooms required, making the model relatively low-cost.

On the negative side, an integrated model may hinder transfer of basic skills from one vocational area to another. This, the researchers warn, could limit students' future job flexibility.

A non-integrated model requires no structural changes in regular classroom instruction, making it especially popular with teachers and administrators. The curriculum emphasizes a minimum level of basic skills

regardless of students' vocational interests or pursuits.

One of the chief disadvantages of this model, other than its personnel and space demands, is that there is little opportunity to reinforce students' basic skills with job training. Also, the researchers found that low scoring students regularly miss classroom instruction because they are pulled out for special help.

As its name implies, the combination model blends the best features of both integrated and non-integrated models. It allows specialists in basic skills to teach their subjects in conjunction with what vocational education teachers are teaching and allows school districts to tailor their programs to district needs and resources.

Source

Building Basic Skills: Models for Implementation by Lucille Campbell-Thrane, Kevin Manning, Karen Okefor, and E. Jane Williams is available from the National Center for Research in Vocational Education, Publications Office, Box N, 1960 Kenny Road, Columbus, OH 43210-1090 (43 pages, order no. SN41-43-NE, \$5.75).



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Educators Looking for Programs That Teach Thinking Skills Have Many from Which to Choose

Commercial publishers vying for the school market are coming out with a bewildering array of thinking skills programs, sometimes leaving the educators who are their customers befuddled and confused.

There are programs that teach creativity and problem solving, that help students to read interpretatively, and that use writing and verbal communication activities to enhance reasoning. Some packages are complete learning units while others are meant to be integrated with more traditional school subjects. There are lessons for gifted students and lessons for the less able; learning materials that rely on computers and videotapes and learning materials built around books, paper-and-pencil exercises, and games.

In short, there seems to be a thinking skills program for every kind of learner at every level of schooling.

But now educators trying to sift through these thinking skills programs can find a little bit of comfort in a new catalog by Research for Better Schools.

Compiled by Janice Kruse and Barbara Z. Presseisen, the catalog summarizes 29 of the major commercially published programs that teach thinking. Each program is described in terms of its major goal, intended

audience, assumptions, process and materials, and cost information. Educators searching for a thinking skills program for their classroom, school, or district can go through the document and quickly identify which programs warrant further exploration. Addresses at the end of each description then tell them where to write for more information.

Thinking skills programs included in the catalog are for students from nursery school through college. There is also a section that describes programs for helping teachers, administrators, and parents to improve their ability to teach thinking.

Source

A Catalog of Programs for Teaching Thinking Skills is available from Research for Better Schools, 444 North Third St., Philadelphia, PA 19123 (37 pages, \$8.95 with a 10% discount on orders of 10 or more).



The Cutting Edge: New R&D Products is provided by The Regional Laboratory for Educational Improvement of the Northeast and Islands, 290 South Main St., Andover, Mass 01810 (508) 470-0098. Permission to reprint is granted; please credit The Regional Lab.

Resource Available for Teachers To Incorporate Thinking Skills Into Regular School Curriculum

An intruder suddenly enters a classroom, creates a disturbance, and just as quickly, leaves.

Most teachers would jump to alert school security. But others—those using a new resourcebook on thinking skills—might use the incident as the basis for teaching their students observation and reporting skills.

In these latter classrooms, the intrusion is part of a set-up, arranged in advance by the teacher as a way to assess the accuracy and detail with which students can describe a sudden event they witness.

It is one of 36 such activities contained in a resourcebook produced by Research for Better Schools to help teachers incorporate the teaching of thinking skills into their regular curriculum.

Compiled by Janice Kruse, the resourcebook contains activities that foster children's basic thinking skills as well as their ability to think critically and creatively, solve problems, and make decisions.

To help children think creatively, for example, one activity asks them to think of ways their lives would be different if an important event had not occurred or if a certain law had not been enacted. Another activity, this one to hone students' problem solving

skills, has students figuring out and then attempting to control factors that impede the flight of paper airplanes. A decision-making activity places students in the role of consumer researchers out to discover which of four to six brands of a product is the best value.

All of the activities are designed to be used with the entire class and are appropriate for use with grades four and up. They require from 10 to 30 minutes each and are coded for the type of thinking skill they address (decision making, critical thinking, and so forth) and the school subject areas for which they are recommended. Descriptions of activities include listings of necessary materials, time requirements, directions, and in some cases, points for discussion.

Source

Classroom Activities in Thinking Skills is available from Research for Better Schools, 444 North Third St., Philadelphia, PA 19123 (cite order no. RS-1187-NE, 119 pages, \$24.75 prepaid).



The Cutting Edge: New R&D Products is provided by The Regional Laboratory for Educational Improvement of the Northeast and Islands, 290 South Main St., Andover, Mass 01810 (508) 470-0098. Permission to reprint is granted; please credit The Regional Lab.

Variety of Software Available for Teaching Keyboarding Skills to Elementary Grade Students

Selecting a computer program with which to teach elementary grade children to use a keyboard quickly and accurately is made easier with a new guide from Northwest Regional Educational Laboratory.

The guide identifies 64 keyboarding software packages, compares 25 packages submitted by producers for review, and recommends nine packages for further review by teachers, computer coordinators, and curriculum directors.

In reviewing the software programs, authors Kathleen Nolf and Dave Weaver found a variety of keyboarding options available. Generally, they say, these range in price from \$25 to \$180 and have a tutorial/drill/game structure.

Nolf and Weaver also found that a common weakness among many keyboarding programs is the failure to teach youngsters correct finger positions. And, while they acknowledge that the use of sound or graphics in a software program can motivate students who might otherwise have "no interest in learning to type," Nolf and Weaver warn that these features may interrupt other activities going on in the classroom.

In recommending software for further consideration by practitioners, Nolf and Weaver explain that they "looked for software which was well-structured, yet fun and motivating."

Source

Two companion documents are available from the Northwest Regional Educational Laboratory, DRS, 101 S.W. Main St., Suite 500, Portland, OR 97204. *A Comparison of Keyboarding Software for the Elementary Grades* identifies available software and provides comparison tables (11 pages, \$3.45). *Elementary Keyboarding Software Product Reports* provides additional information about individual packages (36 pages, \$8.35).



The Cutting Edge: New R&D Products is provided by The Regional Laboratory for Educational Improvement of the Northeast and Islands, 290 South Main St., Andover, Mass 01810 (508) 470-0098. Permission to reprint is granted; please credit The Regional Lab.

Reading and Writing Program Boosts Skills of Third and Fourth Graders

An evaluation by researchers at the Center for Research on Elementary and Middle Schools has found that a comprehensive cooperative learning approach to reading and writing produces higher scores for third and fourth graders on standardized achievement tests of reading comprehension, reading vocabulary, language expression, and spelling.

Researchers Nancy Madden, Robert Stevens, and Robert Slavin also found that these students get more favorable ratings for organization of their writing, compared to control group students.

The learning approach evaluated was CIRC — Cooperative Integrated Reading and Composition.

CIRC maintains and elaborates on teachers' direct instruction through the use of heterogeneous teams and team rewards. In reading, for example, students read stories to one another and discuss the stories to check each other's comprehension. They also

complete word attack, vocabulary meaning, and spelling exercises together, practice reading comprehension exercises, and write in response to the materials that they read.

In writing, students act both as audiences and helpful critics for one another. The program provides frequent opportunities for students to examine their writing from another's point of view. Teammate assistance during content revision and editing helps students develop their ideas in writing and perfect their mechanics.

Source

A Comprehensive Cooperative Learning Approach to Elementary Reading and Writing: Effects on Student Achievement is available from the Center for Research on Elementary and Middle Schools, The Johns Hopkins University, 3505 North Charles Street, Baltimore, MD 21218 (25 pages; \$2.25 prepaid).



Thinking Skills Advocates Lack Agreement on Issues

The need to teach critical thinking skills in schools has sparked the interest of practitioners, association leaders, university professors, publishers, teacher educators, and educational theorists. Yet the alliance formed by these groups, while successful in placing critical thinking skills on the nation's educational agenda, is tentative at best. Without a common definition for critical thinking or agreement on how to improve students' intellectual functioning, these critical thinking advocates are unlikely to have lasting influence in the classroom.

This is the conclusion drawn by Barbara Z. Presseisen of Research for Better Schools after tracing the critical thinking movement from its beginnings in the late 1930s, through the reforms of the 1960s, to the present day. Presseisen points out that what is meant by the thinking skills rubric differs from one advocate to another. Depending upon one's perspective, critical thinking skills can be the evaluation of assertions and the employment of logical principles, an inquiry process for decision-making, or an all-inclusive act that involves not only the generation of ideas, but also acting on those ideas. Each definition, Presseisen warns, has "different messages for the classroom teacher."

The ways in which advocates would organize the teaching of thinking also differ. One faction would treat critical thinking as a separate course, while another would link it to already-existing subject matter.

Perhaps the most serious issue regarding the teaching of thinking, according to Presseisen, is "What do we expect to change in the classroom?" Will teachers and students pose more challenging questions? Will students seek more evidence before making judgements? Will they come to value others' opinions and points of view? On these questions, says the author, there has been no consensus.

Source

Critical Thinking and Thinking Skills: State of the Art Definitions and Practice in Public Schools by Barbara Z. Presseisen is available from Research for Better Schools, 444 North Third St., Philadelphia, PA 19123 (57 pages, \$8.60).



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Uncomplicating Writing Instruction Produces Better Writers

Research indicates that the most effective way to teach writing is to teach it as a process of prewriting, drafting, editing, and sharing. What happens too often, though, is that teachers assign a composition, students turn in a draft, and teachers correct them. Then students either take their "compositions" home, or, if there are too many teacher markings on it, throw them away.

Eventually, teachers, overwhelmed by the workload engendered by this method of reading, correcting, and commenting on several sets of compositions, start to give fewer writing assignments.

John Collins of The NETWORK, Inc., has developed a system that encourages student writing while conserving teacher time and efforts.

The Collins approach differs from others in several ways. For example, students hold onto their compositions in order to revise them later in the year; that way they see how much their writing skills have improved. They read their work out loud to get reactions from their peers before polishing their final drafts. Teachers focus on correcting two or three aspects of writing at a time. Then, in succeeding papers, students pay special attention to these areas until they have mastered them.

The approach also allows teachers, no matter how new or how experienced, to assess their current writing program against a set of standards. Based on that assessment, they can use only those parts of the approach that are relevant.

When properly used, Collins' program requires no more than an hour a week of preparation time, takes up about five hours of classroom time a month, and results in 20 to 30 final drafts a year.

Everyone can be a winner with this program. Students become better writers and teachers derive satisfaction from a job well done.

Source

The Effective Writing Teacher: 18 Strategies by John Collins is available from the Publications Department, The Regional Laboratory for Educational Improvement of the Northeast and Islands, 290 South Main St., Andover, MA 01810 (81 pages, \$6.50 plus \$2.50 postage and handling per order). Cite order no. 202-22.

For your convenience an order form has been included at the back of this booklet.



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Students Who Write to Please The Teacher Don't Necessarily Develop into Good Writers

Students who persist in making the same mistake over and over again in their writing assignments may be misconstruing the teacher's written response to their writing, say two researchers at the Center for the Study of Writing.

The usual way for teachers to respond to students' text is by circling words, drawing arrows, and writing short comments in the margins. Students are expected not only to understand the intent of the teacher's comment but also to have the skills necessary to make appropriate corrections.

But the dynamic of this process is complicated, say researchers Melanie Sperling and Sarah Warshauer Freedman, by the fact that teachers and students each bring their own information, skills, and values to the instructional process. If the student's information, skills, and values are enough out of line with the teacher's, misunderstandings about writing problems and solutions are more likely to occur.

It does no good to ask a student to find another way of expressing "grinning from ear to ear" unless the student has been made aware of clichés and how to avoid them, explain Sperling and Freedman.

This does not mean, however, that students should always strive to please the teacher. In fact, say the researchers, writing to

please the teacher can actually inhibit some students from developing into good writers.

Students who consistently model their writing after what they think the teacher wants may be eclipsing their own "personal sense of judgment about writing," say Sperling and Freedman.

"Mere direction-following does not equal 'interacting' with the teacher's information, skills, and values," say Sperling and Freedman. In order for students to "develop a personal voice" in their writing, they have to decide what's important to them and "work out some compromises."

"The trick will be to convince certain students that pleasing the teacher may not be a magic formula for improving the way they write," Sperling and Freedman conclude.

Source

A Good Girl Writes like a Good Girl: Written Response and Clues to the Teaching/Learning Process is available from the Center for the Study of Writing, University of California at Berkeley, School of Education, Berkeley, CA 94720 (cite order no. CSW-987-NE, 18 pages, \$3.00).



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Recommendations on Reading Improvement Matched with Proven Programs

When the National Academy of Education's Commission on Reading synthesized reading research and produced *Becoming a Nation of Readers*, it brought the best available knowledge on this topic one step closer to use by practitioners.

Now, The Regional Laboratory for Educational Improvement of the Northeast and Islands has brought it closer by still another step.

The Commission report made 17 major recommendations on improving students' reading skills. These recommendations addressed what parents can do to foster their children's reading ability, improvements in classroom practices and school management procedures, and modifications in teacher training. The laboratory has taken the recommendations and matched them with 31 validated programs of the National Diffusion Network (NDN). The result is an easy-to-use chart that shows which of the NDN's classroom-tested programs are particularly pertinent to which recommendations. Educators can select one or more of the recommendations as a focus for improving their reading programs and quickly see which programs might be most useful.

The number of NDN programs that educators can choose from to address a recommendation ranges from four for the recommendation, "Schools should attract and hold more able teachers," to all 31 for the recommendation, "Schools should provide for the continuing professional development of teachers." On the average, recommendations can be implemented by using any one of 14 or 15 reading programs, the chart shows.

Source

Implementing the Recommendations of Becoming a Nation of Readers: A Guide for Practitioners is available from The Regional Laboratory for Educational Improvement of the Northeast and Islands, 290 South Main St., Andover, MA 01810 (\$2.50 per copy plus \$2.50 postage and handling per order). Cite order no. 9032-22.

For your convenience an order form has been included at the back of this booklet.



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Teachers Share Classroom Tips To Help Colleagues Instruct Marginal and At-Risk Learners

Last year the Appalachia Educational Laboratory and the Kentucky Education Association cosponsored two study groups of educators each organized to identify an educational problem of significant concern in the region and develop a product useful in alleviating the problem.

One of the study groups chose as its topic the effective teaching of marginal learners -- students who are at-risk, slow learners, underachievers, or who for some other reason are not succeeding in the regular classroom but yet do not "test low enough" to qualify for special education. After canvassing teachers from across the country for effective strategies, they developed their product, a booklet of practical and easy-to-implement tips for teachers to use in their classrooms.

The responses the teachers got from their colleagues were diverse. They ranged from tips on reorganizing classrooms and schedules to using peer tutoring and community resources.

For instance, one teacher reported pairing above average students with students who are working below class average. When the above average students finish their assignments, they help their partners. Another teacher matches at-risk students with younger students. Making tutors out of at-risk students motivates them to master the task at hand and boosts their sense of self-worth and accomplishment.

Not surprisingly, individualizing instruction turned out to be another popular strategy among teachers making special efforts to reach marginal learners. A number of teachers reported that they alter assignments to meet the ability levels of different students in their classrooms. Sometimes they give at-risk students shorter assignments so that, while they still learn the required skills, they do not become frustrated by the length of time it takes to complete the assignment.

One elementary teacher suggested throwing a class party after completing instruction in a unit (forests, outer space, wildlife, etc.). Students can make up invitations, design decorations, make up games, and plan refreshments based on the things they learned about the topic.

And, say contributors to the booklet, teachers shouldn't overlook community resources. Church groups, the Foster Grandparent Program, and other volunteer organizations, as well as parents, are often ready to tutor marginal learners.

Source

KEA-AEL Tips for Teaching Marginal Learners is available from Appalachia Educational Laboratory, Resource Center, PO Box 1348, Charleston, WV 25325 (11 pages, \$4 prepaid).



Activities for Kids Teach Acceptance and Trust

Placing special needs students into regular classrooms can cause discomfort and even classroom disruption. But what seems like a potential problem can be turned into an opportunity for students to get to know one another better with a resource book developed by The NETWORK, Inc. in cooperation with Amesbury, Massachusetts, Public Schools.

Kids Accepted Here: Activities for the Classroom is a compendium of 27 classroom activities designed to create a classroom climate where all students are accepted, supported, and trusted. By allowing students to explore and express their feelings, and to get to know and understand their classmates, children learn that although differences among people exist, people are more alike than they are different.

The activities were developed primarily for students in kindergarten through fourth grade. Examples include lessons in which children utilize their strengths and increase their sense of self-worth by teaching a classroom lesson on something they do

particularly well; build a vocabulary for differences and feelings by playing word games with a tape recorder; and increase their awareness of feelings of exclusion and rejection by role playing.

Each activity is described with a purpose statement, appropriate grade level, procedures that explain how to set up and carry out the activity, information on time, space, and materials requirements, and any special considerations that should be taken into account before the activity begins.

Source

Kids Accepted Here: Activities for the Classroom is available from the Publications Department, The Regional Laboratory for Educational Improvement of the Northeast and Islands, 290 South Main St., Andover, MA 01810 (37 pages, \$7.50 plus \$2.50 postage and handling per order). Cite order no. 509-22.

For your convenience an order form has been included at the back of this booklet.



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Instructional Computing Requires More Development

Teachers in four states have told the Appalachia Educational Laboratory (AEL) that a great deal more work must go into instructional computing before computers become practical and useful tools in the classroom.

The teachers, responding to an AEL needs assessment, identified the most serious problems in instructional computing as:

- obtaining a sufficient number of computers for teacher and student use;
- lack of financial and logistical planning to integrate computers into school and classroom activities;
- access to information about software sources and to reviews of software;
- access to high quality software;
- access to software simulations, tutorials, and programs that address problem-solving and higher-level skills; and
- training in computer operations and instructional uses.

The AEL needs assessment document is also a how-to-do-it manual for anyone wishing to conduct a similar assessment. Appendices include a needs assessment process manual, a listing of need statements generated by teachers at AEL's needs assessment conferences, and descriptions of brochures addressing priority needs in instructional computing. In addition, there are specific suggestions from well-known computer consultants on the best methods for addressing hardware, software, training, and planning needs.

Source

A Model for Assessing and Meeting Needs in Instructional Computing: Procedures and Results of a Multi-State Needs Assessment by the Appalachia Educational Laboratory is available from AEDS/FAEDS Publications, 1201 16th St., NW, Washington, DC 20036 (83 pages, \$8.00 per copy for AEDS/FAEDS members, \$10.00 a copy for non-members; discounts available for orders of 50 or more; must be pre-paid).



Inservice Video Gives Teachers Strategies for Using Research to Improve Reading Instruction

Educators looking for a way to get the latest information on the theory and practice of reading instruction to teachers might check out an inservice video series entitled "Teaching Reading Comprehension."

The series recently passed muster in a review by Margaret Wilsman of the Wisconsin Educational Radio and Television Networks for the North Central Regional Educational Laboratory.

The series consists of fourteen 30-minute video programs and an 80-page viewers' guide. Each video program features at least one nationally recognized reading researcher who presents his or her research findings in the area of reading comprehension. These theoretical presentations are followed by examples of that research being put into practice in K-8 classrooms.

"The programs do in 29 minutes something I cannot do -- take the audience into a classroom, highlight reading research literature, show the expert in the field, and give the visual charting of what's happening," one program user reportedly told Wilsman.

Wilsman cautions, however, that simply viewing the video is insufficient. "Learning occurs when teachers try the strategies as well as when they view and discuss the

program," she says. Classroom observations by other teachers, reading specialists, or the principal are also helpful in learning to use the new practices. Wilsman also recommends peer coaching.

According to Wilsman, the series has been used successfully in both district and university inservice courses, in statewide telecourses, and by teachers working alone.

The inservice series was developed by the Wisconsin Department of Public Instruction, Wisconsin Educational Communications Board, and the U.S. Department of Education.

Source

Profile of Teaching Reading Comprehension: A Video and Print Inservice Education Series is available from the North Central Regional Educational Laboratory, 295 Emroy Ave., Elmhurst, IL 60126 (cite order no. CST-705-987-NE, 11 pages, \$4 prepaid).



Bulletins Answer Common Questions Educators Have About Reading Instruction

Asking youngsters to predict what will happen next in a story boosts reading comprehension.

A technique known as "work mapping" lets secondary students see the relationship between a new word they've come across in content area instruction and a word or concept they already know in some other context.

Reading aloud to students — older students as well as younger ones — develops students' interest in books, particularly when followed by a lively discussion about the subject read about.

Research-based instructional tips such as these are highlighted in the three bulletins on reading instruction.

According to their author, Jean Sealey, the bulletins were developed "to help bridge the gap between what educators are asking and the solutions research provides." Each bulletin begins with a question teachers fre-

quently ask about reading instruction and then discusses research findings and instructional strategies teachers can put to immediate use in the classroom. Also included is an in-depth description of one particular strategy.

Bulletins cover the topics of increasing student motivation, improving reading comprehension, and teaching reading in the content areas.

Source

Reprints of the R&D Interpretation Service Reading Bulletins, *Teaching Comprehension*, *Teaching Reading in the Content Areas*, and *Motivation* are available from the Publications Department, The Regional Laboratory for Educational Improvement of the Northeast and Islands, 290 South Main Street, Andover, MA 01810 (\$2.50 for the set plus \$2.50 postage and handling per order). Cite order no. 9301-22.

For your convenience an order form has been included at the back of this booklet.



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Peer Editing Relieves Teachers Of Heavy Paperwork While Making Students Better Writers

The teaching of writing is full of dilemmas. Teachers must find time to correct drafts, revisions, and final versions of 20 to 30 compositions; decide whether to teach grammar as a separate subject or incorporate it into writing instruction; and determine the best way to evaluate writing.

Practical tips on all of these problems are provided in a series of bulletins on oral and written communication developed by Jean Sealey of the Appalachia Educational Laboratory.

To lighten teachers' workloads, for example, Sealey suggests teachers try peer editing. In peer editing, youngsters read each others' first drafts and revisions and give their classmates feedback. Over 1,000 research studies show that this kind of cooperative learning has positive effects on student achievement, Sealey states.

The best way to teach grammar, says Sealey, is to relate it to students' own writing. The bulletin on grammar instruction includes sentence-combining activities teachers can use to increase students' writing fluency, as well as a discussion of the various views that influence the teaching of grammar.

Selecting an evaluation technique, Sealey explains, depends on what the teacher wants to know. Is the point of the evaluation to find out whether the student can develop a story plot or whether the student has mastered specific rules of grammar? Sealey then describes a number of options for various evaluation purposes.

Source

Reprints of the *R&D Interpretation Services Bulletins on Written and Oral Communication* are available from the Publications Department, The Regional Laboratory for Educational Improvement of the Northeast and Islands, 290 South Main Street, Andover, MA 01810 (\$2.50 for the set of 3, plus \$2.50 postage and handling per order). Cite order no. 9304-22.

For your convenience an order form has been included at the back of this booklet.



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High School Teachers Given Ideas for Helping Students Get The Most Out of Reading

One of the chief goals of reading in secondary schools is to help students acquire and use the knowledge that appears in texts. Much of secondary school learning is, after all, learning from text -- using prior knowledge, thinking skills, and improved vocabulary to tap into the wealth of new ideas and information that appear in written materials.

Teachers can use a number of strategies to help students get the most out of their secondary school reading assignments. Many of them are highlighted in a new book by the Appalachia Educational Laboratory.

Editors Donna E. Alvermann, David W. Moore, and Mark W. Conley present a variety of practical ideas that teachers can put to immediate use. For example, they suggest that teachers point out what's relevant in a reading assignment before having students actually read it. Or, in post-reading, they suggest that teachers ask students to relate when they've read to their own lives.

The volume also includes sections on how to select textbooks with appropriate readability levels, how to use and manage small groups successfully, and how to help students determine the meaning of unfamiliar words.

Each chapter opens with a question posed by teachers, followed by an answer based on a synthesis of the research. Among the many questions asked are "What impact has effective schools research had on reading instruction in the content areas in the secondary school?", "What influences how and what secondary school students learn from text?", "What are the mechanisms for group work in the classroom?", and "How can content area teachers be energized to respond to the reading needs of students?"

Source

Research Within Reach: Secondary School Reading is available from the International Reading Association, P.O. Box 8139, Newark, DE 19714-8139 (186 pages, \$11.25; \$7.50 for IRA members).



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Skilled Test Takers Receive Higher Scores on Standardized Tests of Student Achievement

Should students be taught "test-wiseness" -- strategies for taking standardized tests that can significantly raise their achievement scores?

Most researchers and practitioners think so. Test-wise students are purported to have less test anxiety, greater control over the testing situation, and higher achievement scores. In addition, say test-makers and users, the more test-sophisticated the students, the more valid the results and equal the student opportunities.

To help teachers ensure that their students are, indeed, "test-wise," the Mid-continent Regional Educational Laboratory has published a handbook on instructing students in test-taking skills.

According to Sharon Koenigs, author of the handbook, test-taking skills fall into four categories: (1) understanding instruction and following directions; (2) using time efficiently; (3) guessing wisely; and (4) applying special strategies to specific types of test questions.

Koenigs suggests that teachers begin teaching the skills "no later than six weeks prior to the actual test date." Total training time, she maintains, "should be no less than six hours, or at least one hour per week for six weeks."

"Test-taking skills are not a substitute for good study skills or content master," she writes. But teachers should not think that teaching test-taking skills is unfair or improper either. "Many school districts require teachers to spend this amount of time on test-taking skills. Since norm-referenced tests compare students, failure to spend as much time on these skills as do other schools puts the students at a disadvantage."

Source

Test Scores Count! A Handbook for Teaching Test-Taking Skills is available from the Mid-continent Regional Educational Laboratory, 12500 E. Iliff Avenue, Suite 201, Aurora, CO 80014 (45 pages, \$9.45).



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Inservice Workshop Guides Teachers in Integrating Thinking Skills into Curriculum

A growing number of thinking skills advocates are arguing that rather than being a separate course, instruction in thinking skills should be integrated into every curricular area in a school.

This means that every teacher must become a teacher of thinking skills.

To help teachers learn how to accomplish this, Research for Better Schools has developed a thinking skills workshop for use by principals, curriculum coordinators, and other individuals with staff development responsibility. Workshop materials guide both elementary and secondary school trainers in determining local needs in thinking skills and designing and implementing a thinking skills staff development program that matches those needs. They also acquaint trainers with various approaches that teachers can use to help students reason, understand, and apply what they learn in the classroom; make them aware of current programs and materials for teaching thinking; and orient them to implementing and evaluating programs in which thinking skills instruction has been incorporated.

This workshop was originally prepared for a three-day regional thinking skills academy held in Philadelphia, Pennsylvania. It is organized into 15 sessions lasting from 30 to 90 minutes each. Materials for each session include listings of objectives; outlines of activities and discussion topics for teachers; worksheets, checklists, and transparency masters; and listings of suggested readings for both trainers and trainees. Materials come pre-punched and ready for insertion in a three-ring binder.

Source

Thinking Skills is available from Research for Better Schools, 444 North Third St., Philadelphia, PA 19123 (280 pages, \$25.00, prepaid).



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Vocational Educators Require Additional Training and Skills To Teach Special Needs Youth

Many handicapped and disadvantaged youth are not developing the skills necessary to make a smooth transition from school to work because vocational educators are not trained to deal with the special problems of these learners, reports a monograph published by the ERIC Clearinghouse on Adult, Career, and Vocational Education at The Ohio State University.

"Vocational educators must be better prepared to deal with the special needs learner, not only in adapting the vocational curriculum, but through instruction in job-related academic and interpersonal skills," says Patricia L. Sitlington of the Iowa Department of Education and author of the monograph.

Sitlington cites the lack of interpersonal skills, lack of job-related academic skills, and lack of specific vocational skills as the three main causes of unemployment and underemployment among special needs youth.

Moreover, says Sitlington, vocational educators should gain "at least a familiarity with the other agencies and the services they have to offer."

At present, vocational and special educators and other partners in the special needs student's transition from school to work communicate infrequently with each other. The result is that vocational educators are sometimes reluctant to mainstream special needs youth into their classes because they don't know what help is available in confronting the problems.

To help vocational educators adjust to the demands of teaching special needs youth, Sitlington suggests that they upgrade their skills in individualizing instruction, teaching job-related academic and interpersonal skills, and collecting assessment data on student performance. In addition, vocational educators should gain an understanding of the different disciplines involved in the transition from school to work and their own role in the individualized planning process.

Source

Transition, Special Needs, and Vocational Education is available from The National Center for Research in Vocational Education/ERIC, National Center Publications, Box F, 1960 Kenny Road, Columbus, OH 43210 (39 pages, \$5.25).



Children Learn about Literacy by Sharing Writing Activities with Classmates and Friends

Kids can unintentionally help each other become literate "just by being kids."

Sound far-fetched?

In some classrooms, it happens all the time, according to research conducted at the Center for the Study of Writing at the University of California, Berkeley.

Researcher Anne Haas Dyson, who conducted the study, argues that as children develop and learn to define themselves, both as individuals and as members of a group, they come to appreciate the ways that written language can help them become part of the social scene in their classroom.

In a classroom where students are allowed to mix their academic and social lives, students are much more likely to be open about their writing and to share it with their classmates and friends. One consequence of this is that, as the children read and comment on each other's work, they end up "poking and pulling at written language together." In the process, a great deal of "unintentional helping" takes place.

Children want their stories and poems to be accepted and admired by others, Dyson says; in turn, the response they receive from their peers helps them "learn about literacy -- the range of purposes for which it can be used, the techniques used to capture an audience's interest, the power of print to help one achieve social status."

Although there is no formal "peer tutoring" or "collaborative writing," Dyson continues, "the children are providing for themselves much more sophisticated lessons than adults could ever hope to."

This does not suggest, however, that the language arts curriculum should be uninstructed. Quite the opposite, in fact. Teachers, Dyson says, must still be in charge, making sure that children understand that they are expected to write and to stay on task. Moreover, although the children evaluate themselves and each other continually, the teacher must still regularly evaluate the children's writing.

And evaluation, Dyson cautions, is still one activity that is better off being done in private.

Source

Unintentional Helping in the Primary Grades: Writing in the Children's World is available from the Center for the Study of Writing, School of Education, University of California at Berkeley, Berkeley, CA 94702 (29 pages, \$3.00).



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